

## Abstract

The Next Generation Learner will utilize technologies to meet life-long learning challenges of the 21<sup>st</sup> century. An effective learning community designed for the Next Generation Learner (NxGL) should incorporate the following:

- Personalized learning based on data-driven goals for instruction;
- Comprehensive systems of learning supports to ensure the success of all students;
- Outstanding knowledge and skills required for success in a globalized working and learning environment;
- Performance-based learning, which requires students to demonstrate mastery based on high, clear, and commonly-shared expectations;
- Constructive learning experiences through both the geographic and the Internet-connected community; and
- Authentic student voice, which is the deep engagement of students in directing and owning their individual learning.

Our goals for this grant include:

1. The advancement of a technology-rich learning environment to assist students in developing creativity and innovation, collaboration and communication skills, problem-solving and critical-thinking skills, media, information literacy and technology skills.
2. Transform teaching and learning strategies by creating a culture of support in the use of technology. This will be accomplished by partnering curriculum staff with technology staff to develop units of instruction integrating technology with an enriched content. The curriculum and technology staff will then coach teachers in the application of the material and technology.
3. Develop constructive learning opportunities for students through internet-connectivity, project-based learning, and individual learning practices. Students will establish personal learning goals, document their progress, and “store” artifacts of their work through an electronic portfolio.
4. Professional development will be an integral part of the Compass grant project. Teachers will require further instruction in technology integration within the traditional classroom environment. Additionally, the teaching staff will receive support in utilizing assessment data to guide instruction.
5. Compass will become a model school for the NxGL. We will develop a manual of the leadership requirements, professional development, and teacher and student projects and activities which prove to be effective. Our goal is to “package” a quality technology model that is scalable and sustainable in order to disseminate to other schools in the State of Idaho.

In order to meet the outlined goals, Compass will require updated technology devices, an updated and adequate network, as well as software. Additionally, funds for professional development and key personnel will be expended.

## Educational Need

Given recent and upcoming changes to required instructional standards and a new assessment (SBAC) to replace the ISAT, it is difficult to deny that a need exists. Although, Compass Public Charter School (CPCS) has performed well on statewide assessments over the course of the schools existence; we recognize that the SBAC will provide a new baseline from which we must grow and improve.

Funds are often awarded to low performing schools in an effort to help them improve. However, with the intent of the technology pilot grant being the development of a scalable project that can be disseminated to other districts in the State, a more effective awardee for this grant could be a school that has a record of demonstrated success such as Compass.

Currently, Compass is working toward the objectives of creating a next generation leaning environment by focusing efforts on integrating technology in the classroom while simultaneously developing clear learning targets, assessments, and instructional materials which are aligned to the Idaho Core Standards. Compass has developed math applications classes and grade level curriculum to exercise performance-based learning. Teachers have been introduced to Schoolnet and best practices for utilizing data to guide instruction.

Compass is ready to move to the next level of technology integration. We envision teachers using technology in the classroom to enhance instruction and student engagement, to participate in virtual fieldtrips, to use online methods for collaboration and communication such as Google Sites, and to utilize e-portfolios to document and evaluate student work.

We are confident that student achievement can and will increase through effective teacher planning based on student data. Compass has a need in the area of academic improvement for our LEP and Special Education populations. Using data to inform instruction will provide these subgroups with personalized learning goals and strategies.

Finally, Compass has a partnership with the College of Western Idaho to offer dual credit courses. Students attending high school at Compass have the opportunity to complete over 50 college credits on our campus by the time they graduate. Students enrolled in dual credit courses require internet connectivity to access Blackboard and collaborate with other students enrolled in the same dual credit course.

### ISAT Data (Schoolnet Dashboard)

<b>Student Subgroup</b>	<b>% Proficient in Reading</b>	<b>% Proficient in Math</b>
Male	95.3%	96.9%
Female	97.0%	94.6%
American Indian	100.0%	100.0%
White	97.1%	95.4%
Asian	91.7%	100.0%
Black	100.0%	100.0%
Hispanic	91.3%	91.3%
LEP	66.7%	66.7%
Special Education	50.0%	100.0%

## School Demographics and Data

### CURRENT STUDENT ENROLLMENT PER STUDENT SUBGROUP (Schoolnet Dashboard)

	Number of Students	Percent*
Total Enrollment	530	-
Male	252	47.55%
Female	278	52.45%
American Indian Alaskan Native	2	0.38%
White	440	83.02%
Asian	16	3.02%
Black	3	0.57%
Pacific Islander	-	-
Hispanic or Latino	46	8.68%
Multiple	-	-
Provision 2/3 school attendee	-	-
LEP	5	0.94%
Migrant	-	-
Special Ed	10	1.89%

### Dual-credit Course Data

Grade	Total Students Enrolled at Compass	Number of Students Taking Dual Credit Courses	Average Number of Dual Credits Completed
11	20	16	16
12	13	10	34

Total credits completed by all current 11<sup>th</sup> and 12<sup>th</sup> grade students as of June 2013 = 595 credits

Compass offers the following dual credit courses on our campus with our own teachers who are adjunct faculty with CWI:

#### **Current Courses**

English 101 = 3 credits  
 English 102 = 3 credits  
 English 267 = 3 credits  
 English 268 = 3 credits  
 History 111 = 3 credits  
 History 112 = 3 credits  
 Philosophy 101 = 3 credits  
 Philosophy 202 = 3 credits  
 Spanish 101 = 4 credits  
 Math 147 = 5 credits  
 Math 170 = 5 credits  
**Total credits = 38**

#### **Professional Technical**

Food Handlers License = 1 credit  
 Broadcast Technology = 1 credit

#### **New Courses for 2013-14**

Biology 100 = 4 credits  
 Political Science 101 = 3 credits  
 Political Science 102 = 3 credits  
 Spanish 102 = 4 credits

**Total General Ed. Credits = 52**

**Scope and Sequence**

**Planning –**

Our first step in implementing the grant goals will involve the creation of a technology task-force. This group will include our technology director, curriculum coordinator, administrator, and one teacher from each of the elementary, middle, and high school levels. The task-force will participate in necessary training to develop the skills and knowledge of the next generation learning environment. This group will serve as our teacher leaders available to train and support the teaching team at their school levels.

Compass will continue to provide professional development related to Schoolnet and other best practice models for collecting, analyzing, and utilizing student data to inform instruction.

**Involvement -**

As previously described, a core team of teachers and the administrator will be involved at the planning and implementation level. All teachers will be involved at the level of participating in professional development, receiving classroom support, and implementing strategies within their classroom. Students will participate in technology integrated lessons and activities within their classroom, they will have a voice in choosing performance projects that meet their interest and provide them with the opportunity to hone their technology skills, as well as create personal e-portfolios to save learning artifacts. Parents will have the opportunity to see project-based learning presentations and to participate in student-led conferences where students will go over the artifacts in their e-portfolios.

**Preparation -**

Teachers will complete a technology skills survey to identify needs for professional development. Professional development will be designed based on the needs of the majority while the school’s technology director and/or curriculum coordinator will work one-on-one with teachers identified as in need of more support.

Compass will utilize funds awarded through the Technology Pilot Grant along with Title II and the ISEE Phase IIB grant the school received for professional development.

The action plan includes specific activities related to the implementation of strategies. We have included initial activities and intend to use this document to develop, track, evaluate, and coordinate activities referenced as well as future activities.

Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Activity #1																				
				Activity #2																
																Activity #3				

Key Focus Area	O = Outcome & E = Evaluation	Strategy	Implementation Timeline		
			Activity 1	Activity 2	Activity 3
STUDENT LEARNING	O = Achievement on SBAC  E = Students will show growth from first year to second year of taking the SBAC	1. Use performance tasks to develop problem-solving and critical-thinking skills.		X	
		2. Use assessment data to develop individualized student learning goals.		X	
		3. Use technology to engage all learners, especially low-performing learners.		X	
	O = Demonstration of information literacy and technology skills  E = Qualitative data through observation of student skills. Evaluation of student presentations, e-portfolios, research, etc.	4. Utilize e-portfolios to document student learning artifacts.		X	
		5. Incorporate the use of technology in student performance project presentations.		X	
		6. Provide access to online resources for research.	X		
		7. Utilize Google Sites for students to collaborate and communicate regarding educational topics.		X	
USE OF TECHNOLOGY	O = Teachers will use data to inform instruction  E = Schoolnet teacher access data. Student performance data on district benchmark assessments and Statewide assessments	1. Utilize <i>Understanding By Design</i> framework for development of instructional units.		X	
		2. Become proficient at using Schoolnet to access data.		X	
		3. Use effective planning designed to meet each student's academic needs.		X	
		4. Use data to guide instructional decisions and target interventions.		X	
	O = Teachers will integrate technology in their daily lesson planning  E = Technology will be utilized in classroom instruction 50% of the time	5. Create engaging lessons using curriculum aligned to the Common Core and enhanced by the use of technology.		X	
		6. Use online portfolios to review and document student artifacts.		X	
		7. Encourage the use of technology in student presentations.		X	
		8. Provide online resources for students to utilize in research.		X	
		9. Provide opportunities for performance projects that require collaboration across subjects and incorporate the use of technology.		X	
TECHNOLOGY EQUIPMENT	O = Updated equipment will provide the necessary tools to accomplish the grant goals  E = Availability of technology devices in the classroom	10. Purchase of clickers, document cameras, iPads, laptops, fiber optic network, and software.	X		
PROFESSIONAL DEVELOPMENT	O = Assessment of teacher knowledge in the use of technology  E = Survey results	1. Conduct a technology survey.	X		
		2. Schoolnet training and support.	X		
	O = Teachers will understand how to use data to inform instruction  E = Teachers use of data to inform instruction as evaluated by lessons and interventions	3. Professional development related to effective assessments and utilizing classroom assessment data.	X		
		4. Utilize data to differentiate instruction to meet individual student needs.		X	

	<b>O = Outcome &amp; E = Evaluation</b>	<b>Strategy</b>	<b>Implementation Timeline</b>		
	<b>O</b> = Teachers will integrate technology in their daily instruction.	5. Observation of classroom teaching by the curriculum coordinator and technology director.	X		
	<b>E</b> = Teachers will use technology in the classroom 50% of the time	6. Support in creating and presenting curriculum through the use of technology.		X	
		7. Record of activities and strategies that work.		X	X
	<b>O</b> = Dissemination of Technology Model  <b>E</b> = Completed manual to be distributed	8. Creation of a manual outlining a scalable technology model for dissemination to other schools.			X

## Sustainability and Scalability

There are four vital components to developing and maintaining a technology-rich environment for the next generation learner:

1. Equipment and infrastructure (network) is the first pertinent component needed to develop the next generation learning environment. This expense needs to be frontloaded to get the program started. This could be accomplished through grants, equipment donations, or saving state technology funds over the course of a couple of years. Additionally, some savings will be generated through the development of a technology-rich environment. For example, by evaluating student's work through e-portfolios and student participation comments on Google Sties, teachers will use less paper; copy machines will use less ink/toner and receive less wear and tear. Using the multitude of internet resources for teacher instruction and student research can reduce the need for textbooks. All of these savings can be refocused to purchase/replace technology devices.

Hopefully most districts will not be starting from scratch. Infrastructure is most likely in place for large and medium sized districts, leaving only small districts and charters in need of improved network capability. Technology devices are most likely the highest need as technology changes rapidly and new software requires updated equipment. Compass utilized a grant several years ago to purchase one of our computer labs which is now in need of replacement. Recent budget constraints have made it difficult to save the funds necessary to cycle these older computers out. Many districts may be in a similar situation.

Beyond the initial equipment costs, schools can utilize technology funds received annually through the State Department of Education to update/replace equipment as necessary and to purchase trending software. A replacement cycle is the best method for distributing funds and reducing costs. Now that there is some stability in our state schools budget, this appears more plausible.

2. The next important element for creating a technology-rich environment is personnel. As a small district (less than 600 students) our model for the technology pilot grant will utilize two key personnel in a team teaching/mentoring approach. Our technology director and our curriculum coordinator will collaborate on creating units/lessons that integrate technology and meet the goals of the Idaho Core standards. This mentoring team will observe in classrooms to see how technology is being integrated. They will offer training, support, and mentoring for teachers who need assistance. At Compass, the technology director and curriculum coordinator are part-time positions rather than full time.

Technology-integrated teaching is not about replacing teachers with machines. Rather, it's about leveraging technology to provide students and teachers with immediate feedback, holding each individual student accountable for his or her academic success, and personalizing coursework to best meet students exactly where they are. Without highly effective teachers and instruction, a technology-integrated teaching model cannot be successful or sustainable.

3. A next generation learning environment can only be accomplished with quality professional development and ongoing support. The model of training trainers is the best practice for accomplishing sustainable professional development activities. In our model, a small task-force will receive “outside” training and they will have the responsibility of training the rest of the Compass staff. See Appendix D in our District Technology Plan for professional development ideas.
4. Finally, there needs to be accountability for both professional development and for use of technology in the classroom. Asking teachers as well as the technology task-force to document training and technology-integration activities will help with plan implementation and sustainability. See Appendix D in our District Technology Plan for professional development ideas and an accountability table to document teacher participation in training.

Compass will use funds from the technology pilot grant to create a Next Generation Learning Environment Manual along with teacher training videos. These materials will be made available to districts that want to implement a similar model to the one that we are creating at Compass.

Costs associated with creating a next generation learning environment are primarily initial start-up costs such as equipment purchases, network capability, and professional development. Once established, annual costs are significantly less. Technology devices typically need to be replaced every three years; therefore, annual costs depend on the number of computer labs and/or mobile devices. Once teacher leaders have been identified and trained, professional development costs are minimized. Based on the plan Compass has outlined for our school with three computer labs and three classroom sets of iPads, it would cost approximately \$47 per student to replace equipment on a three year cycle.

## **Budget Narrative**

### Professional Development

The Technology Taskforce will participate in Schoolnet training, workshops available for integrating technology, etc. Funds from both ISEE Phase II B as well as Title II funds will be dovetailed with the Technology Pilot Grant funds to cover professional development expenses.

### Equipment

The advancement of a technology-rich learning environment will require additional access to technology. Therefore, the district network will need to be updated to a fiber optic network. Additional technology devices such as classroom sets of iPads, teacher laptops, desktop computers, document cameras, and software will be purchased to increase student engagement and make integration of technology seamless in the classroom.

### Salaries/Stipends

The Technology Taskforce will become teacher leaders tasked with training and supporting the remaining Compass teaching staff. Additionally they will develop curriculum and lesson units incorporating technology that addresses the Idaho Core Standards. The Technology Director and Curriculum Coordinator will also assist with onsite coaching/training and provide support in the integration of technology in the classroom. The grant will be utilized to provide members of the Technology Task Force with a small stipend for the additional investment of their time. The school will pay the Technology Coordinator's salary from our general funds and free up his schedule to allow for the additional support required to meet our project goals.

### Creation of Dissemination Materials

Throughout the technology pilot grant project, members of the task-force will document the activities and projects that we develop and implement. We will put together the most effective activities and projects into a Next Generation Learning Environment Manual. Additionally, we will make training videos showing methods and strategies for integrating technology in the classroom.

Budget Items	Unit Cost	Quantity	Year 1 Cost per Student	Year 2 Cost per Student	Total Cost
<b>Classroom</b>					
Desktop Computers	\$ 350.00	99	\$ 31.50	\$ 31.50	\$ 34,650.00
Software/Apps (Office 2012, OS Windows 8, e-text books, educational apps, assesement apps, etc.)	\$ 300.00	99	\$ 27.00	\$ 27.00	\$ 29,700.00
Doc Cameras	\$ 500.00	19	\$ 8.64	\$ 8.64	\$ 9,500.00
iPad 2 (16GB) 6th-12th (Mobile sets)	\$ 400.00	70	\$ 25.45	\$ 25.45	\$ 28,000.00
iPad mini (16GB) K-5th (Mobile sets)	\$ 300.00	30	\$ 8.18	\$ 8.18	\$ 9,000.00
App License for multipule devices	\$ 1,500.00		\$ 1.36	\$ 1.36	\$ 1,500.00
Total Costs			\$ 102.14	\$ 102.14	\$ 112,350.00
<b>Network Upgrades</b>					
Upgrade to fiber Optic to increase bandwidth	\$ 2,130.00		\$ 1.94	\$ 1.94	\$ 2,130.00
Upgrade to Zywall switches	\$ 200.00	2	\$ 0.36	\$ 0.36	\$ 400.00
Upgrade Websense (Internet filter) Server	\$ 1,000.00	1	\$ 0.91	\$ 0.91	\$ 1,000.00
Add additional Proxy Server	\$ 1,000.00	1	\$ 0.91	\$ 0.91	\$ 1,000.00
Installation Costs	\$ 1,500.00		\$ 1.36	\$ 1.36	\$ 1,500.00
Network Color Laser Printer	\$ 800.00	2	\$ 1.45	\$ 1.45	\$ 1,600.00
Toner for Printers	\$ 200.00	4	\$ 0.73	\$ 0.73	\$ 800.00
Total Costs			\$ 7.66	\$ 7.66	\$ 8,430.00
<b>Salaries/Stipends</b>					
Curriculum/Tech integration	\$ 20,000.00		\$ 18.18	\$ 18.18	\$ 20,000.00
Teacher Training	\$ 2,500.00		\$ 2.27	\$ 2.27	\$ 2,500.00
Creating videos and manuals	\$ 10,000.00		\$ 9.09	\$ 9.09	\$ 10,000.00
Total Costs			\$ 29.55	\$ 29.55	\$ 32,500.00
<b>Teacher</b>					
Gateway Laptops	\$ 500.00	30	\$ 13.64	\$ 13.64	\$ 15,000.00
Wireless Mouse	\$ 10.00	30	\$ 0.27	\$ 0.27	\$ 300.00
Case	\$ -	30	\$ -	\$ -	\$ -
Windows 8 OS & Office 2012	\$ 114.00	30	\$ 3.11	\$ 3.11	\$ 3,420.00
Total Costs			\$ 17.02	\$ 17.02	\$ 18,720.00
<b>Training Materials Development</b>					
Create Training Videos	\$ 2,500.00		\$ 2.27	\$ 2.27	\$ 2,500.00
Off site classes	\$ 1,500.00		\$ 1.36	\$ 1.36	\$ 1,500.00
On site Workshops	\$ 1,000.00		\$ 0.91	\$ 0.91	\$ 1,000.00
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
Total Costs			\$ 4.55	\$ 4.55	\$ 5,000.00
<b>Matirals/Supplies</b>					
Next Generation Learning Environment Manual	\$ 1,500.00		\$ 1.36	\$ 1.36	\$ 1,500.00
Training Videos	\$ 1,500.00		\$ 1.36	\$ 1.36	\$ 1,500.00
Total Costs			\$ 2.73	\$ 2.73	\$ 3,000.00
<b>Total Costs</b>					
			\$ 163.64	\$ 163.64	\$ 180,000.00